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# PATENT ABSTRACTS OF JAPAN

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(71) Applicant : HITACHI LTD

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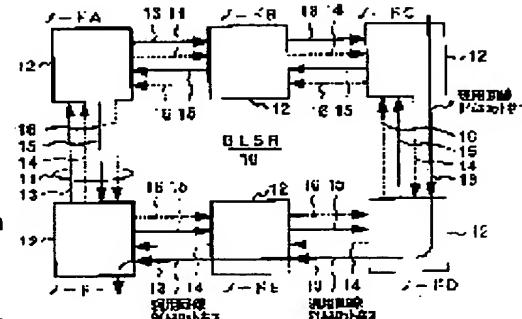
(72) Inventor : USUHA KEIJI  
TAKAHASHI MASATOSHI  
KIMURA MITSUNOBU  
OBAYASHI MASATAKE  
MORI TAKASHI

## (54) BLSR NETWORK SYSTEM

### (57) Abstract:

**PROBLEM TO BE SOLVED:** To provide a time slot control method in the protection of a path when a fault is switched in changing the time slot by changing a time slot in a path passing through a high speed side in BLSR.

**SOLUTION:** When a span switch or single ring switch is activated, a path is protected by using the time slot number of a preliminary transmission line, which is similar to the time slot number of a present transmission line where a fault occurs. When the ring switch is activated owing to a multiplex fault, the path is transferred to the time slot number of the preliminary transmission line, which is similar to the time slot number of the adjacent present transmission line where the fault occurs and it is transmitted. The path is turned back from the pertinent time slot number on the preliminary transmission line. A node 12 holds a table where the time slot numbers used on BLSR are described in order to the node 12 terminating the path regarding the path on the present transmission line receiving or transmitting data.



## LEGAL STATUS

[Date of request for examination]

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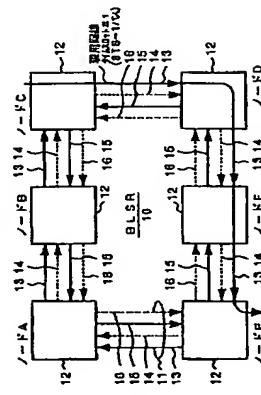


図22) 図14、図18および図20バス説定例におけるバス転送図。

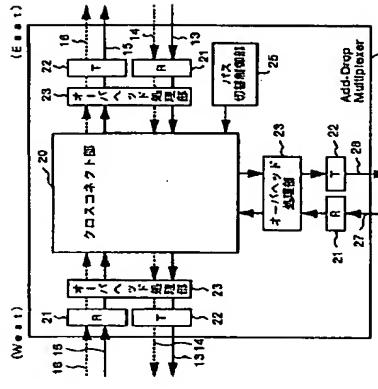
図23 図20におけるノードAが保持するTSIテーブルの構成図。  
 図24 図20におけるノードBが保持するTSIテーブルの構成図。  
 図25 図20におけるノードCが保持するTSIテーブルの構成図。  
 図26 図20におけるノードDが保持するTSIテーブルの構成図。  
 図27 図20におけるノードEが保持するTSIテーブルの構成図。  
 図28 図20におけるノードFが保持するTSIテーブルの構成図。  
 図29 図20におけるノードGが保持するTSIテーブルの構成図。  
 図30 本発明による移用回線から予備回線へ接続する動作を示すフローチャート。

【符号の説明】 10...BLSRネットワーク、11...光ファイバ伝送路群、12...ノード送信回線、13...CCW方向予偏回線、14...CW方向予偏回線、15...CCW方向予偏回線、16...BLSRネットワーク、17...光レシーバ、22...光トランジスタ、23...オーバーハンド処理部、25...スイッチ制御部、27...Add回線、28...Drop回線

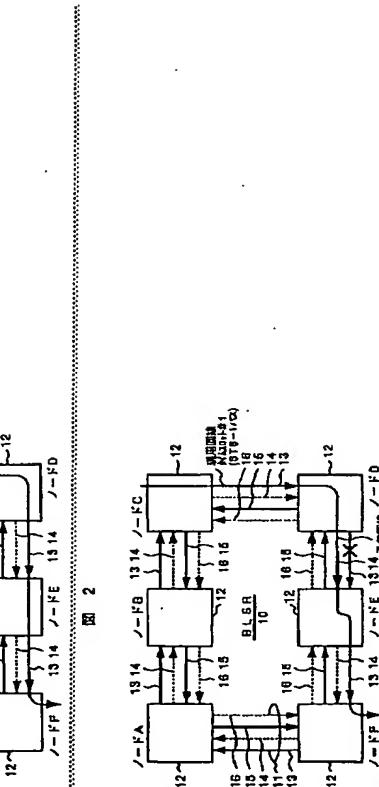
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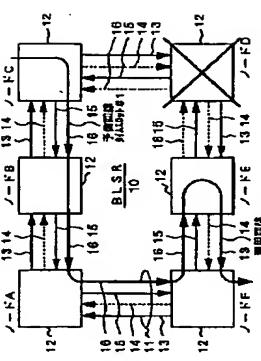
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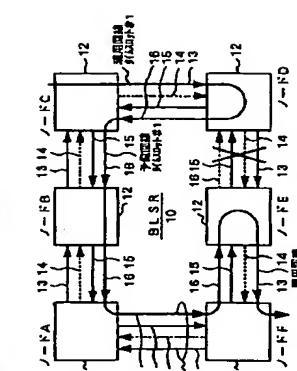
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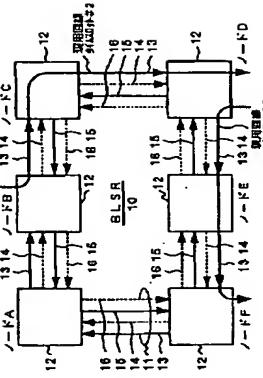
【図5】



【図3】

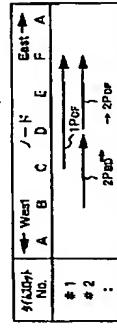


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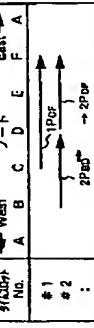


【図7】

【図8】

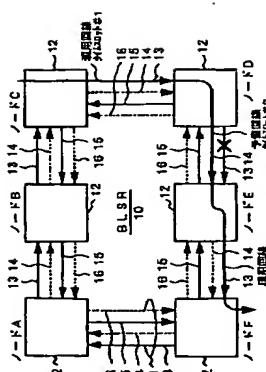


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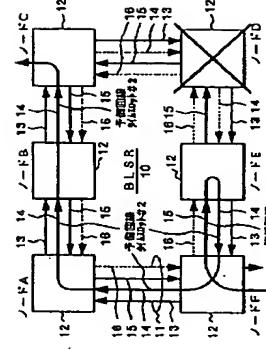


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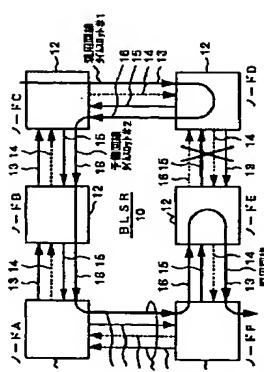




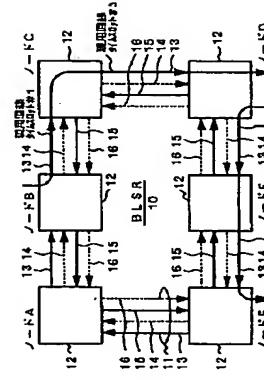
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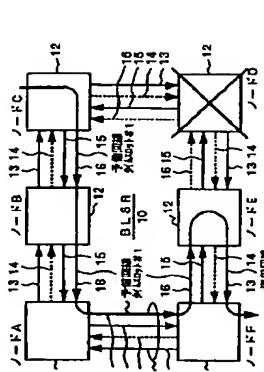
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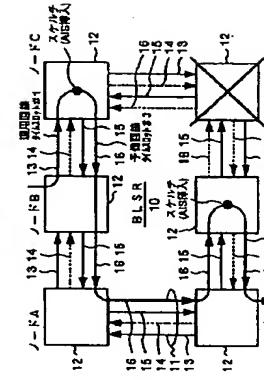
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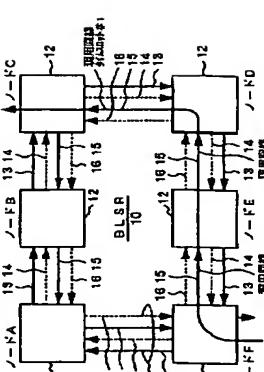
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【図23】

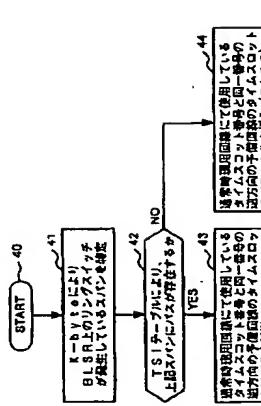
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一		#2	-	-	-	-	-
F		#3	-	-	-	-	-
A	Wrd	:	-	-	-	-	-
		#1	-	-	-	-	-
		#2	-	-	-	-	-
		#3	-	-	-	-	-
		:	-	-	-	-	-

(a)

		#A Inh No.	A-B#	B-C#	C-D#	D-E#	E-F#	F-A#
ノ	Out- going	#1	-	-	-	-	-	-
一		#2	-	-	-	-	-	-
F		#3	-	-	-	-	-	-
A	East	:	-	-	-	-	-	-
		#1	-	-	-	-	-	-
		#2	-	-	-	-	-	-
		#3	-	-	-	-	-	-
		:	-	-	-	-	-	-

(b)

【図29】



【図29】

